Serial No.: 10/661,741

Filed: September 12, 2003

Page : 2 of 10

## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of Claims:

1. (Previously presented) A method, comprising:

receiving a search query entered by a user;

identifying at least a first population group associated with the user;

determining a first article as being responsive to the search query;

determining a population signal for the first article based at least in part on the

first population group;

determining a first ranking score for the first article based at least in part on the population signal; and

outputting, in response to the search query, a search result in which the first article is ranked using the first ranking score.

- 2. (Previously presented) The method of claim 1, wherein determining the first population group associated with the user comprises determining demographic data associated with the user.
- 3. (Previously presented) The method of claim 2, wherein determining the demographic data associated with the user comprises determining a likely geographic location for the user.
- 4. (Previously presented) The method of claim 3, wherein determining the likely geographic location for the user comprises determining at least one of the following: the Internet Protocol address from which the search query was sent; an address input by the user to access a search engine; and demographic data input by the user.
- 5. (Previously presented) The method of claim 2, wherein determining the demographic data for the user comprises determining a least one for the following: age, age range, sex, race,

Serial No.: 10/661,741

Filed: September 12, 2003

Page : 3 of 10

primary language, secondary language, location, income, income range, a continent, a region, a country, a state, a country, a city, a gender, an ethnic group, a group, persons with a shared characteristic, persons with a shared interest, persons grouped by a predetermined selection, and internet service provider data.

- 6. (Previously presented) The method of claim 1, wherein determining the first population group associated with the user comprises determining a demographic data associated with the user.
- 7. (Previously presented) The method of claim 6, wherein determining the demographic data associated with the user comprises a least one of the following: determining the language of the search query; or determining data associated with previous senders of the search query.
- 8. (Previously presented) The method of claim 1, wherein determining the first population group associated with the user comprises determining a self-identification data associated with the user.
- 9. (Original) The method of claim 8, wherein the self-identification data is selected from at least one of the following: user registration data, user preference data, and user selected data.
- 10. (Previously presented) The method of claim 1, wherein determining the first population group associated with the user comprises determining an automatic-identification data associated with the user.
- 11. (Previously presented) The method of claim 10, wherein the automatic-identification data comprises at least one of the following: an IP address, a domain, and default data obtained by an application associated with the user.
- 12. (Previously presented) The method of claim 1, wherein the population signal comprises a selection score for the first article in a context of the first population group.
- 13. (Previously presented) The method of claim 12, wherein the selection score for the first article in the context of the first population group comprises a number of clicks for the first article by members of the first population group for the search query.
- 14. (Previously presented) The method of claim 12, wherein the population signal comprises a weight of relationship between the selection score and the search query.

Serial No.: 10/661,741

Filed: September 12, 2003

Page : 4 of 10

user;

15. (Previously presented) The method of claim 1, wherein the population signal comprises a number of members of the population group that selected an article returned for the search query.

- 16. (Previously presented) The method of claim 1, wherein the population signal comprises a number of members of the first population group that input the search query.
- 17. (Previously presented) The method of claim 13, wherein the population signal comprises a smoothing factor associated with the clicks.
- 18. (Previously presented) The method of claim 1, wherein the population signal comprises a total selection score.
- 19. (Previously presented) The method of claim 18, wherein the total selection score comprises a total number of members of the first population group that selected the first article.
- 20. (Previously presented) The method of claim 1, further comprising determining a second population group associated with the user; and wherein determining the population signal for the first article is further based at least in part on the second population group.
- 21. (Previously presented) The method of claim 1, further comprising determining a second article associated with the search query; and determining a second ranking score for the second article based at least in part on the population signal.
- 22. (Original) The method of claim 21, further comprising ranking the first article and the second article based at least in part on the first ranking score and the second ranking score.
- 23. (Previously presented) A computer-readable medium containing program code, comprising:

program code for receiving a search query entered by a user; program code for identifying at least a first population group associated with the

program code for determining a first article as being responsive to the search query;

Serial No.: 10/661,741

Filed: September 12, 2003

Page : 5 of 10

program code for determining a population signal for the first article based at least in part on the first population group;

program code for determining a first ranking score for the first article based at least in part on the population signal; and

program code for outputting, in response to the search query, a search result in which the first article is ranked using the first ranking score.

- 24. (Previously presented) The computer-readable medium of claim 23, wherein the program code for determining the first population group associated with the user is adapted for determining demographic data associated with the user.
- 25. (Previously presented) The computer-readable medium of claim 24, wherein determining a demographic data associated with a user comprises determining a likely geographic location for the user.
- 26. (Previously presented) The computer-readable medium of claim 25, wherein determining a likely geographic location for the user comprises determining at least one of the following: the Internet Protocol address from which the search query was sent; an address input by the user to access a search engine; and demographic data input by the user.
- 27. (Previously presented) The computer-readable medium of claim 24 wherein determining the demographic data for the user comprises determining a least one of the following: age, age range, sex, race, primary language, secondary language, location, income, income range, a continent, a region, a country, a state, a country, a city, a gender, an ethnic group, a group, persons with a shared characteristic, persons with a shared interest, persons grouped by a predetermined selection, and internet service provider data.
- 28. (Previously presented) The computer-readable medium of claim 23, wherein determining the first population group associated with the user comprises determining a demographic data associated with the user.
- 29. (Previously presented) The computer-readable medium of claim 28, wherein determining the demographic data associated with the user comprises at least one of the

Serial No.: 10/661,741

Filed: September 12, 2003

Page : 6 of 10

following: determining the language of the search query; or determining data associated with previous senders of the search query.

- 30. (Previously presented) The computer-readable medium of claim 23, wherein determining the first population associated with the user comprises determining a self identification data associated with the user.
- 31. (Original) The computer-readable medium of claim 31, wherein the self-identification data is selected from at least one of the following: user registration data, user preference data, and user selected data.
- 32. (Previously presented) The computer-readable medium of claim 23, wherein determining the first population group associated with the user comprises determining an automatic-identification data associated with the user.
- 33. (Previously presented) The computer-readable medium of claim 32, wherein the automatic-identification data comprises at least one of the following: an IP address, a domain, and default data obtained by an application associated with the user.
- 34. (Previously presented) The computer-readable medium of claim 23, wherein the population signal comprises a selection score for the first article in a context of the first population group.
- 35. (Previously presented) The computer-readable medium of claim 34, wherein the selection score for the first article in the context of the first population group comprises a number of clicks for the first article by members of the first population group for the search query.
- 36. (Previously presented) The computer-readable medium of claim 34, wherein the population signal comprises a weight of relationship between the selection score and the search query.
- 37. (Previously presented) The computer-readable medium of claim 23, wherein the population signal comprises a number of members of the first population group that selected an article returned for the search query.

Serial No.: 10/661,741

Filed: September 12, 2003

Page : 7 of 10

38. (Previously presented) The computer-readable medium of claim 23, wherein the population signal comprises a number of members of the first population group that input the search query.

- 39. (Previously presented) The computer-readable medium of claim 35, wherein the population signal comprises a smoothing factor associated with the clicks.
- 40. (Previously presented) The computer-readable medium of claim 23, wherein the population signal comprises a total selection score.
- 41. (Previously presented) The computer-readable medium of claim 40, wherein the total selection score comprises a total number of members of the first population group that selected the first article.
- 42. (Previously presented) The computer-readable medium of claim 23, further comprising determining a second population associated with the user; and wherein determining the population signal for the first article is further based at least in part on the second population group.
- 43. (Previously presented) The computer-readable medium of claim 23 further comprising:

program code for determining a second article associated with the search query; and

program code for determining a second ranking score for the second article based at least in part on the population signal.

- 44. (Previously presented) The computer-readable medium of claim 43 further comprising program code for ranking the first article and the second article based at least in part on the first ranking score and the second ranking score.
- 45. (Previously presented) The method of claim 1, wherein the population signal is based at least in part on a total selection score, a selection score based at least in part on the population group, a smoothing factor, a number of times a query was input by members of the population group, or a number of times a query was input.

Serial No.: 10/661,741

Filed : September 12, 2003 Page : 8 of 10

46. (Previously presented) The computer-readable medium of claim 23, wherein the population signal is based at least in part on a total selection score, a selection score based at least in part on the population group, a smoothing factor, a number of times a query was input by members of the population group, or a number of times a query was input.